PUBLIC FINANCE SYSTEMS FOR COPING WITH THE CRISES: LESSONS FROM THE THREE BALTIC STATES

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ABSTRACT

Of all EU member states the three Baltic countries were hit the hardest by the economic crises in 2008-2010 but they recovered relatively quickly, with all three countries even being able to qualify for EMU membership (Estonia joined the Eurozone in 2011, Latvia in 2014 and Lithuania in 2015). The speed and determination with which the Baltic countries carried out austerity measures is often put forward as an example for other E(M)U member states. This paper critically assesses the validity of various models of austerity (expansionary fiscal contractions, internal devaluation and fiscal devaluation) when applied to the case of the Baltic States. It is argued that in the case of the Baltic countries more complex economic mechanisms were at play then these models suggest. In the paper specific attention is paid to the way fiscal consolidation was shaped in the three countries, and to the role of EU structural funding. The paper concludes with a discussion of the lessons that can be learned for other EU countries.

1. INTRODUCTION

Mid 2007 the world entered into a financial crisis which led to the most severe economic downturn since the end of WWII. The crisis began in the United States as a result of the sub-prime mortgage-backed securities crisis and spread out to a more general financial crisis which then hit the real economy and ended with (global) recession. Additionally, in the Eurozone a sovereign debt crisis emerged.

Even though in 2010 financial market conditions improved and economic growth resumed in most countries - these improvements having resulted largely from the massive support measures taken by governments and central banks in Europe and North America, with a significant impact on fiscal deficits and public debt levels – the economies of most EU member states declined again as from 2012. Early 2014 economic recovery regained ground (European Commission, 2014a) but slowed down again and came to a halt at the end of 2014 (European Commission, 2014d). Economic recovery in Europe seems to be a matter of fits and starts.

This article focuses on how the three Baltic States (Estonia, Latvia and Lithuania) handled the crises. The case selection of these three countries is based mainly on similarities in general background variables as size, GDP per

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capita and time of EU membership (2004). Comparing the three countries is interesting because even though the starting point before the crisis was more or less the same for all three Baltic countries, the situation during the crises and the measures taken were different. Still, what the three countries have in common is that – in comparison to other EU countries – they had very high growth rates before the crisis, were hit very hard in 2008-2010, but then recovered relatively quickly. Throughout the crisis Estonia was able to keep its public debt level one of the lowest in the EU and qualified easily for euro membership (which started in January 2011). The two southern Baltic States were in a more difficult situation and saw their deficits and debts rise significantly from 2008 onwards. The Latvian government responded to EU and IMF pressure by taking on debt; early 2009 it accepted a 7.5 billion euro EU-IMF loan package. Just as Latvia, but without support, Lithuania has been able to reduce deficits and to keep the public debt level acceptable. Latvia has adopted the euro in January 2014; Lithuania is scheduled to join the Eurozone on January 1, 2015. Currently, the three Baltic States are among the few EU Member States for which no in-depth-review (IDR) is considered to be needed within the framework of the Macroeconomic Imbalance Procedure (MIP) (European Commission, 2013).

The Baltic experience with the crisis has drawn considerable academic attention. Various authors have tried to make sense of what happened in the run-up to the crisis and of how recovery took place in the Baltic countries (Brixiova, Vartia & Wörgötter, 2010; Deroose et al., 2010; Kuokštis & Vilpišauskas, 2010; Purfield & Rosenberg, 2010; Lindner, 2011; Masso & Krillo, 2011; Weisbrot and Ray, 2011; Åslund, 2012a and 2012b; Mezö & Bagi, 2012; Kallaste & Woolfson, 2013; Kattel & Raudla, 2013). Often, the speed and determination with which the Baltic countries carried out austerity measures is put forward as an example for other E(M)U member states, such as Spain and Greece (see for instance Åslund, 2012a and 2012b). Likewise, the case of the Baltic States is often highlighted as evidence of effective expansionary fiscal consolidation and/or successful internal and/or fiscal devaluation. This paper critically assesses these various claims. The aim of the paper is twofold. First, to critically assess the validity of the use of the model of "internal devaluation" (i.e. cutting wages and public expenditures while retaining fixed exchange rates) to describe what went on in the Baltics. It is argued that in the case of the Baltic countries more complex economic and political mechanisms were at play. Secondly, it aims at looking at the lessons that can be drawn from the Baltic experience, especially for other countries in the Eurozone that –still- suffer from the crises. Here it is argued that lessons can surely be learned from how the Baltic countries handled the crisis, but they are not as simple as often thought and they are to a large extent context-specific. Moreover, rather than merely emphasizing the success the Baltic countries had in recovery, attention should also be paid to the question why these countries were hit the hardest in the first place.

The paper is structured as follows. In section 2 a brief overview is given of the debate on fiscal consolidation and the implications for the analysis in this paper are put forward. In section 3 we present some (macro-economic) facts and figures which shed light on the magnitude of the impacts of the crises on the Estonian, Latvian and Lithuanian economies, compared to the EU-28 at large, covering a fairly long period (2004-2013), using data from Eurostat. Section 4 discusses the policy mix chosen by the three countries. Section 5 deals with fiscal consolidation and specific austerity measures, based on in-depth analysis of earlier research and policy documents. Section 6 looks specifically at the importance of fiscal equalization measures within the EU (through the EU Structural Funds and specific support measures). Section 7 discusses and concludes.

2. SMART FISCAL CONSOLIDATION?

Long before the crises hit, a significant body of literature developed that deals with the question whether fiscal retrenchment has expansionary or recessionary effects. The debate was triggered by the idea of *expansionary fiscal contractions* as witnessed by Giavazzi & Pagano (1990, 1996) for Ireland, Denmark and –later- Sweden. Subsequently, the counterintuitive notion that fiscal contractions could have expansionary (i.e. non-Keynesian) effects was empirically tested in a number of studies and largely corroborated (Alesina & Perotti, 1995, 1997; McDermott & Wescott, 1996; Perotti 1996, 1998; Alesina & Ardagna, 1998; Hemming, Kell & Mahfouz, 2002). In addition to the notion of expansionary contractions, two more ideas were put forward in the same literature (and again largely corroborated empirically, see however Heylen & Everaert, 2000 and Kumar, Leigh & Plekhanov, 2007, for different empirical findings). First, it was emphasized that expenditure-based consolidations are more likely to be effective, i.e. the composition of consolidation measures matters. Secondly, it was argued that fiscal austerity could be beneficial rather than harmful from an electoral viewpoint (Alesina, Perotti & Tavares, 1998). Taken together this all means that fiscal adjustments can be relatively painless, both in an economic and in a political sense (“gain without pain”).

Gradually this message found its way into the policy domain and became the conventional wisdom in IMF and EU circles (see Dellepiane-Avellaneda, 2014, for a reconstruction). In the policy arena a comprehensive literature on successful consolidations emerged and was readily available before the crises hit. Despite criticism on the basic idea of austerity without pain (Krugman, 1995, for example) and on the neglect of equity issues and their electoral implications (Mulas-Granados, 2004, 2006), and notwithstanding a short period of “emergency Keynesianism” (as Hall, 2013, called it; see also Ortiz & Cummins, 2013) when the crisis hit in 2008, followed by (media and internet) debate on fiscal stimulus-versus-fiscal austerity, the need for fiscal consolidation was never truly questioned in policy circles (see Buti & Carnot, 2013, for a recent defense of the European Commission's position).

If we put the political debate aside for a bit, we can argue that two different but connected factors play a part when discussing fiscal consolidation within the context of economic crises: credibility and competitiveness. In the earlier literature the need for fiscal consolidation and the mechanisms by which austerity would work its way into the economy are mainly framed from the perspective of credibility (of government vis-à-vis investors, entrepreneurs, consumers and citizens) within single economies, whereas more recently (see for instance EEAG, 2013, 2014; Sinn, 2014) the issue of fiscal consolidation is framed as a means to tackle imbalances in competitiveness between core and peripheral countries in the EU.

From the credibility perspective fiscal consolidation should aim at falling real interest rates and increased confidence of economic actors, as this will result in crowding-in effects on private investment and in increased consumption (outweighing the negative and multiplied effects on aggregate demand of fiscal consolidation as such, in line with the idea of expansionary fiscal contractions). Three main characteristics of such "smart" fiscal consolidation can be put forward (see among others Alesina & Giavazzi, 2012; Kolev & Matthes, 2013; EEAG, 2014):

- Spending cuts are to be preferred to tax increases;
- Spending cuts should be accompanied by structural reforms (labor market reforms, pension and health system reforms, public sector reforms);
- Fiscal adjustment can be gradual, but countries with large credibility problems should front-load fiscal consolidation.

From the perspective of competitiveness, re-alignment of prices is the key issue. For those countries that cannot engage in (formal) external devaluation (because of EMU membership or hard pegs), and that cannot engage in autonomous changes of import duties or export subsidies (due to being subject to a common EU trade policy) internal and fiscal devaluation may be alternatives, both aiming at reducing production costs, particularly labor unit costs. As governments generally do not have direct influence on overall prices, *internal devaluation* is done through substantial cuts in public sector wages which are assumed to propagate to the private sector and eventually to producer prices. Internal devaluation is usually accompanied by unemployment and has recessionary impacts (EEAG, 2013). *Fiscal devaluation* is about a change in tax composition, with the objective of directly reducing labor costs (rather than through wages, as with internal devaluation), by reducing payroll taxes and employers' social security contributions and at the same time increasing the VAT. The idea goes back to Calmfors (1998) and has recently been advocated by De Mooij & Keen (2012). The basic idea is that such a reduction of unit labor costs will be passed on into lower producer prices of goods destined for domestic and export markets (the higher VAT only bears on goods consumed domestically, including imported ones, not on exports). Consumer prices of imports increase due to the higher VAT; consumer prices of exports fall due to lower unit labor costs. Consumer prices of goods produced and consumed domestically remain more or less unchanged as lower taxes on employers are offset by the higher VAT. Empirical research points towards positive permanent effects (on GDP, on employment, on net exports) of such a shift. However, the size of the effects is rather modest and the evidence seems to be mixed (Koske, 2013), as they hinge on a number of factors like the openness of the economy (the more open, the more effective), design details (which taxes are exactly reduced, in what way is the VAT increased?), and timing (is the effect offset by consumers bringing forward purchases?). Moreover, the actual use of such fiscal devaluation can be constrained by issues of equity (and public support), of budgetary neutrality and of externalities on other countries (and the resulting need for increased VAT-coordination within the EU).

From the above it follows that in our analysis of the way the Baltic States handled the crisis (and of the lessons-to-be-learned for other EU countries) we will focus on the following elements:

1. Magnitude of fiscal consolidation;
2. Composition of consolidation:
   - expenditure/tax mix;
   - the use of internal devaluation measures (i.e. cuts in public sector wages);
   - the use of fiscal devaluation measures (i.e. shift of tax burden from labor to consumption);
3. Timing (i.e. degree of frontloading);
4. Use of structural reforms and other accompanying policies.

3. THE BALTICS IN THE 2004-2013 PERIOD: FACTS AND FIGURES

In this section some basic data are presented on the Baltic States, compared with the EU-28, for 2004-2013. The purpose of this section to give context to the analyses and discussion in the remaining sections.

In Table 1 some basic economic indicators are presented. From table 1 it follows that the Baltic countries had relatively high growth figures from 2004 (the year they became EU member) up to 2007, compared to the EU-average. In this period of rapid expansion unemployment rates fell below EU average from 2006 onwards. As can be expected in times of expansion, inflation was relatively high, especially in Latvia.

The crisis hit the Baltic countries in 2008 and recovery started in 2010. Aiginger (2011), in a comparison of 20 countries worldwide, shows that the Baltic states were hit the hardest, in terms of in-crisis (i.e. 2009) decline of GDP, in terms of cumulated decline over 2008-2010, in terms of steepness of the crisis (i.e. decrease of quarterly GDP from the pre-crisis peak to the crisis trough) and in terms of trend change (actual growth in 2008-2010 relative to the pre-crisis trend growth). The cumulative output loss associated with the recession in the Baltics was almost twice the size of the losses suffered by the hardest-hit countries in the 1997-1998 Asian crisis. Of the three countries Latvia experienced the worst loss of output in the world (in the period 2007-2009 it suffered a 24% GDP loss); in comparison with similar downturns only the United States in 1929, during the Great Depression, did worse (Weisbrot & Ray, 2011).

Table 1. Basic economic indicators; Baltic States and EU-28 (2004-2013)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Real GDP growth, %										
Estonia	6.2	8.9	10.2	7.3	-4.1	-14.1	3.3	8.7	4.5	2.2
Latvia	8.8	10.1	11.0	10.0	-2.8	-17.7	-1.3	5.3	5.2	4.1
Lithuania	7.4	7.8	7.8	9.8	2.9	-14.8	1.6	6.0	3.7	3.3
EU-25/27/28	2.6	2.2	3.4	3.2	0.4	-4.5	2.0	1.6	-0.4	0.1
Unemployment rate (# of unemployed as % of labor force)										
Estonia	10.1	8.0	5.9	4.6	5.5	13.5	16.7	12.3	10.0	8.6
Latvia	11.7	10.0	7.0	6.1	7.7	17.5	19.5	16.2	15.0	11.9
Lithuania	10.9	8.3	5.8	4.3	5.8	13.8	17.8	15.4	13.4	11.8
EU-25/27/28	9.2	9.0	8.2	7.2	7.0	8.9	9.6	9.6	10.4	10.8
Annual inflation, %										
Estonia	3.0	4.1	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2
Latvia	6.2	6.9	6.6	10.1	15.3	3.3	-1.2	4.2	2.3	0.0
Lithuania	1.2	2.7	3.8	5.8	11.1	4.2	1.2	4.1	3.2	1.2
EU-25/27/28	2.3	2.3	2.3	2.4	3.7	1.0	2.1	3.1	2.6	1.5

Source: Eurostat. Data for EU-25/27/28 (2004-2006/2007-2012/2013)

Even from the annual growth data provided in table 1 it is clear that the three countries have not been completely in sync. Formally the crisis started already in April 2008 in Latvia, and in July 2008 in Estonia and Lithuania (when two quarters in a row showed a fall in GDP), but actually Estonia was hit earlier (quarter-on-quarter growth rates went down to zero already in the 2nd quarter of 2007) and it recovered earlier. The crisis was the shortest in Lithuania; Latvia was last to recover.

In 2009 unemployment rates increased dramatically in all three Baltic States, much more than in the EU as a whole. In 2010 the Baltic unemployment rates were the second-highest in the EU after Spain. Youth unemployment soared to over 30% in all three Baltic countries (Kallaste & Woolfson, 2013).

In the pre-crisis period inflation was on the rise and well above EU average. In 2008 inflation exceeded 10% in all three countries, then dropped when the crisis hit. Latvia had one year (2010) of deflation. Generally inflation is rather volatile in the post-crisis period (Meso & Bagi, 2012), with Lithuania being the most stable country of the three in terms of inflation development.

Table 2 shows the development of some main fiscal variables. Overall, in terms of fiscal discipline the three Baltic States, and especially Estonia, have an outstanding track record, with deficit and debt levels well within the limits set by the EU. Estonia has debt levels that are the lowest in the EU and had budget surpluses in the pre-crisis period; during the crisis it was able to keep the deficit down. Latvia and Lithuania however had considerable deficits during the crisis; both countries were subjected to the EU excessive deficit procedure (EDP) in 2009 (and have received abrogations in 2013). The debt level of Latvia deteriorated in 2009, which was caused by the fact that Latvia had to bail out (i.e. nationalize) its second-largest commercial bank (Parex) in November 2008.

Generally, levels of public expenditure, public revenues and taxes are relatively low in the Baltics. Some increase in public expenditure and in the revenue level can be seen in 2009 compared to 2008, but this is caused partly by the denominator effect of falling GDP. In 2013 expenditure levels, revenue levels and tax burdens were almost back to the pre-crisis level.

Table 2 also shows the development of government bond yields. For Estonia data are missing as the issuing of bonds is very rare. When comparing the yields with Germany and the EU-28, the two other Baltic States show slight spreads that have increased considerably in 2009, indicating loss of credibility on the capital markets, which seems to have been regained in more recent years.

Finally, table 3 shows some variables that indicate potential macroeconomic imbalances (most of these indicators have been taken from the set of Eurostat's MIP indicators). Current account deficits (shown in table 3 with a 3-year average) have been considerable in the pre-crisis period (in 2007 they were larger than those of Greece and Portugal), but have effectively been reduced by the crisis. Capital accounts (not shown in table 3) have always been positive for the three countries. The crisis reduced the main capital component, inward FDI; especially Estonia saw FDI fall, but in all three countries the pat-

Table 2. Basic fiscal indicators; Baltic States and EU-28 (2004-2013)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
General government deficit (-)/ surplus (+), % of GDP										
Estonia	1.6	1.6	2.5	2.4	-2.9	-2.0	0.2	1.0	-0.3	-0.5
Latvia	-1.0	-0.4	-0.6	-0.6	-4.0	-8.9	-8.2	-3.4	-0.8	-0.9
Lithuania	-1.5	-0.5	-0.4	-1.0	-3.3	-9.3	-6.9	-9.0	-3.2	-2.6
EU-25/27/28	-2.9	-2.5	-1.5	-0.9	-2.4	-6.9	-6.4	-4.5	-4.2	-3.2
General government gross debt, % of GDP										
Estonia	5.0	4.6	4.4	3.7	4.5	7.1	6.5	6.0	9.7	10.1
Latvia	4.2	11.7	9.9	8.4	18.6	36.4	46.8	42.7	40.9	38.2
Lithuania	19.3	18.3	18.0	16.7	15.4	29.0	36.3	37.3	39.9	39.0
EU-25/27/28	62.2	62.7	61.5	58.9	62.2	74.5	78.2	80.8	83.5	85.4
Total general government expenditure, % of GDP										
Estonia	34.0	33.6	33.6	34.0	39.7	44.7	40.4	38.0	39.7	38.9
Latvia	34.5	34.2	36.0	33.9	37.0	43.4	44.2	38.9	36.6	35.7
Lithuania	34.1	34.1	34.3	35.3	38.9	44.9	42.3	42.5	36.1	35.5
EU-25/27/28	46.7	46.7	46.2	45.5	47.0	51.0	49.9	48.5	48.9	48.5
Total general government revenues, % of GDP										
Estonia	35.6	35.2	36.1	36.4	36.7	42.8	40.6	39.1	39.5	38.4
Latvia	33.5	33.7	35.5	33.3	33.0	34.5	36.0	35.5	35.8	34.8
Lithuania	32.5	33.6	33.9	34.3	34.8	35.6	35.4	33.5	33.0	32.8
EU-25/27/28	43.8	44.2	44.7	44.6	44.6	44.1	43.5	44.0	44.6	45.3
Tax burden (total general government receipts from taxes and social contributions, as % of GDP)										
Estonia	30.6	30.7	30.8	31.5	32.0	35.5	34.2	32.4	32.7	32.5
Latvia	28.5	29.1	30.4	30.5	29.4	26.8	27.2	27.5	27.9	n.a.
Lithuania	29.0	29.1	29.9	30.1	30.6	30.4	28.5	27.4	27.2	n.a.
EU-25/27/28	39.8	40.1	40.6	40.5	40.3	39.6	39.6	40.0	40.6	n.a.
Government bond yields (EMU convergence criterion definition) in %										
Estonia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latvia	4.9	3.9	4.1	5.3	6.4	12.4	10.3	5.9	4.6	3.3
Lithuania	4.5	3.7	4.1	4.6	5.6	14.0	5.6	5.2	4.8	3.8
Germany	4.0	3.4	3.8	4.2	4.0	3.2	2.7	2.6	1.5	1.6
EU-25/27/28	n.a.	n.a.	4.1	4.6	4.6	4.2	3.8	4.3	3.7	3.0

Source: Eurostat. Data for EU-25/27/28 (2004-2006/2007-2012/2013)

tern of FDI inflow is rather volatile. The indices for the real effective exchange rate were steadily rising in the pre-crisis period and competitiveness decreased even further during the crisis. This appreciation is largely due to inflation differentials with other countries. Only as from 2010/2011 did wage cuts (shown here by the development of nominal unit labor costs, with a 3-year average) start kicking in.

One of the factors that is often mentioned to explain the pre-crisis boom as well as the vulnerability of the Baltic states to the crisis, is the development of private credit flow (i.e. the net amount of liabilities that especially households have incurred) and of the resulting stock of private debt. Table 3 shows that prior to the crisis private credit flow was positive in all three countries. It was much higher than in Germany, even higher than in Greece. The crisis has reduced private credit flow and consequently private debt levels in all three countries; private debts levels have been and still are relatively high in Estonia.

Domestic demand significantly exceeded GDP in all three countries in the 2004-2008 period, which had to be met by net imports (reflected in the current account deficits). Export volume changes show a clear pattern in the case of Estonia, with exports declining in the run-up to and during the crisis, but booming as from 2010. In the case of Latvia exports suffered in 2007 but picked up just at the moment (2008) when the crisis hit, followed by recovery. Exports by Lithuania have been decreasing in volume since 2009.

Table 3. Selected indicators of macroeconomic (im)balance; Baltic States, selected other MSs and EU25/27/28 where applicable (2004-2013)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Current account balance (% of GDP, 3-year average)										
Estonia	-12.0	-11.2	-11.9	-12.9	-12.9	-7.1	-1.5	1.4	-0.1	-1.2
Latvia	-8.0	-10.1	-14.7	-17.7	-17.9	-8.3	-0.6	2.5	-1.2	-2.8
Lithuania	n.a.	n.a.	-8.4	-10.8	-12.8	-8.6	-3.7	-0.7	-1.8	-1.2
Real effective exchange rate (2005=100; deflator: consumer price indices; 42 trading partners)										
Estonia	99	100	101	106	113	115	111	112	111	114
Latvia	102	100	103	110	121	127	117	118	116	115
Lithuania	102	100	100	103	109	116	110	111	109	110
EU-25/27/28	104	100	99	103	103	100	92	91	87	90
FDI, inward (% of GDP)										
Estonia	8.0	20.6	10.7	12.4	7.3	9.5	8.4	1.5	6.8	3.9
Latvia	4.6	4.4	8.4	8.1	3.8	0.4	1.6	5.1	3.9	2.6
Lithuania	3.4	3.9	6.0	5.1	4.1	0.0	2.2	3.4	1.7	1.2
EU-25/27/28	0.5	1.2	2.0	3.5	1.5	2.3	1.8	3.3	2.3	2.5
Nominal unit labor cost – 3 year % change										
Estonia	15.7	14.7	18.8	31.6	47.9	38.6	12.8	-3.4	-2.4	9.6

Latvia	8.9	27.3	41.7	69.3	74.6	33.1	-4.6	-19.5	-6.5	10.5
Lithuania	n.a.	n.a.	n.a.	n.a.	28.8	13.0	0.3	-7.9	-4.3	6.0
Private credit flow in % GDP, consolidated, annual data										
Estonia	16.0	23.3	35.5	30.0	7.6	-10.8	-5.0	0.1	4.7	n.a.
Latvia	11.8	18.1	29.1	24.2	9.2	-4.8	-6.1	-4.0	-0.7	n.a.
Lithuania	8.9	14.5	18.7	23.1	10.7	-9.6	-5.4	-0.7	-0.3	n.a.
Germany	-1.7	-0.4	0.9	1.9	0.8	-1.2	0.0	1.8	1.5	n.a.
Greece	11.9	14.8	17.1	16.9	16.4	4.1	0.3	-3.6	-6.4	-5.9
Private debt (as % of GDP, consolidated), no data for EU 25/27/28										
Estonia	85.5	96.7	115.6	127.5	143.9	154.6	143.1	128.8	129.4	n.a.
Latvia	49.9	64.0	80.4	83.9	86.5	100.4	95.1	82.6	64.4	n.a.
Lithuania	40.4	50.2	62.3	75.5	77.9	84.9	75.9	66.2	62.5	n.a.
Domestic demand (final consumption expenditure plus gross capital formation) in % GDP										
Estonia	107.0	106.5	110.2	109.2	104.0	94.5	93.5	97.4	98.9	97.3
Latvia	115.6	114.5	121.6	120.1	113.7	101.5	101.4	104.8	103.9	101.9
Lithuania	107.1	107.1	110.1	113.3	111.8	101.8	101.9	102.7	99.2	99.0
EU-25/27/28	98.8	99.3	99.6	99.4	99.8	99.0	99.1	98.9	98.1	97.2
%-y-o-y-change in export volume										
Estonia	3.9	11.0	-3.3	-4.2	-2.0	-10.4	10.4	17.7	3.1	n.a.
Latvia	-6.5	9.5	2.8	-4.8	8.4	-2.3	4.9	8.2	8.6	n.a.
Lithuania	0.4	-3.1	3.5	1.2	1.4	-0.6	-4.8	-0.4	-5.8	n.a.

Source: Eurostat. Data for EU-25/27/28 (2004-2006/2007-2012/2013)

4. THE CRISIS IN THE BALTICS: CAUSES AND BASIC RESPONSE

The way the crises emerged and was handled in CEE countries in general has been discussed by various authors (Bideleux, 2011; Åslund, 2012a; Jacoby, 2014; Epstein, 2014; Medve-Bálint, 2014). Others have specifically analyzed what happened in the run-up to the crisis and how recovery took place in the Baltic countries (Brixiova, Vartia & Wörgötter, 2010; Deroose c.s., 2010; Kuokštis & Vilpišauskas, 2010; Purfield & Rosenberg, 2010; Lindner, 2011; Masso & Krillo, 2011; Weisbrot and Ray, 2011; Åslund, 2012a and 2012b; Mezö & Bagi, 2012; Kallaste & Woolfson, 2013; Kattel & Raudla, 2013). From this literature by and large the following narrative emerges.

At the heart of the Baltic pre-crisis boom were huge macroeconomic imbalances in the form of massive capital inflows and imports, in other words a combination of a capital account surplus and a current account deficit. FDI inflow was largely due to abundant supply of liquidity from the "old" EU Member States (heavily facilitated by EU regulation or lack thereof) and the United States. From the early 90s onwards Western banks (in the case of the

Baltics: mainly Scandinavian banks) developed strong retailing networks in the region. In Estonia in 2007 99% of the banks were foreign-owned, in Lithuania this was just over 90% and in Latvia 60%. Capital controls were relaxed in the run-up to accession and increasingly so with EU membership, in addition to the general broad liberalization in the real economy. The outlook of EMU membership meant that liberalization of capital markets was further intensified. Interest rates were kept relatively high in order to keep inflation (which was relatively high because of the economic boom) at an acceptable level. Domestic currencies were (hard) pegged to the euro. Loans were increasingly taken out in foreign currencies because of lower foreign interest rates (especially the Scandinavian banks treated the Baltic market as part of their domestic market, with loan conditions and interest rates that were similar). All this fueled a credit/consumption and housing boom. Private debt levels went up, whereas public debt levels remained low. The predominant growth model for the three small and open economies was that of enhanced trade and specifically that of export-led growth. Exports indeed increased significantly, but as imports (partly paid for by credit) grew even more, current account deficits emerged and increased over time. However, the persistent high growth rates turned attention away from the question whether these situation was sustainable in the longer run.

Already in 2007, reacting on the emerging credit crisis in the US, foreign, in particular Scandinavian, banks decided to drastically decrease the supply of credit, first in Estonia, later in the two other Baltic countries as well. Lending conditions were tightened which first led to a squeeze of the real estate market, followed by other sectors. As credit supply was further reduced, domestic demand fell sharply as did imports (thereby turning around the current account balance). At the end of 2008 these domestic factors were aggravated by the emerging global financial and economic crisis, which led to an almost full stop of capital flows and a considerable reduction of international trade.

The relatively large share of domestic banks made Latvia especially vulnerable to global developments; in the case of Estonia and Lithuania it can be said that possible bail-out issues were not domestic issues at all, but Swedish issues. With its second-largest domestic bank, Parex, being close to collapse, Latvia had to intervene, in November 2008, and nationalized Parex.

The basic response of all three countries to the crisis was to go for fiscal retrenchment, to keep monetary policy neutral, and to maintain the fixed exchange rates (in Latvia through a fixed exchange rate regime maintained by the central bank, in Estonia and Lithuania through currency boards) rather than going for external devaluation (as advocated by for example Paul Krugman and –initially- by the IMF). The latter choice was made for various reasons (see Kattel & Radula, 2013, partly following Kuokštis & Vilpišauskas, 2010). Nominal exchange rate adjustment was at odds with accession to EMU, large shares of loans had been given out in euros (which meant that nominal adjustment of the domestic currencies would impose huge internal costs on consumers and firms), the three countries did not really have experience with managing adjustments (they had been currency pegged economies since the early 90s), and the domestic currencies strongly represented national values (devaluation would be identified with loss of self-identity and of sovereignty). In short: monetary policy was out of bounds when it came to fighting the crisis.

5. FISCAL CONSOLIDATION MEASURES IN THE BALTICS

In this section we first discuss which fiscal consolidation measures have been taken in the three Baltic countries, by looking at their magnitude and timing, at the expenditure/tax mix, at the expenditure (operational and program) measures and at the tax measures specifically. Subsequently we confront these measures with the characteristics of the main models of fiscal consolidation that were outlined in section 2: smart fiscal consolidation, internal devaluation and fiscal evaluation. We also discuss the effectiveness of the fiscal consolidation measures.

In order to get an overview of fiscal consolidation measures, we have used existing literature on the policy responses in the three countries (Kattel and Raudla, 2013; Kickert, Randma-Liiv & Savi, 2013) or specifically for one country (Jõgiste, Peda & Grossi, 2012, for Estonia; Di Comite c.s., 2009, for Latvia). In addition we have used policy documents and reports that are part of the EU Convergence/Stability cycle (programs as submitted by countries, but especially European Commission assessments), and specific studies like OECD (2011, 2012a), European Commission (2012, 2014b and 2014c), Kickert, Randma-Liiv & Savi/COCOPS Trend Report, 2013, International Monetary Fund, 2013, and Ortiz & Cummins (2013). Moreover, data from the three national statistical offices have been used.

It must be mentioned here that there is a lack of comparable data about (the outcomes of) consolidation measures in absolute numbers or as % of GDP. There is an IMF (2013) report of the outcomes about consolidation measures in Lithuania for the total period of 2009-2012. For Estonia there is year-by-year data from the OECD (OECD, 2012), but for Latvia data can only be found in the Convergence Programs which are not well comparable with the above-mentioned datasets.

Magnitude and timing of fiscal consolidation. All three Baltic States implemented sizable fiscal consolidations during 2009-2010 (see table 4). From the table it follows that Estonia was the first to react to the crisis and to implement expenditure measures already in the 2008 to the size of 2.0% of GDP.

Latvia also took –smaller- consolidation measures already in 2008. Generally, all three states clearly front-loaded their fiscal consolidation.

The largest fiscal consolidation was done by Latvia in 2009, adding up to 9.5% of GDP. For Estonia the fiscal consolidation efforts would have been even larger than is now shown in table 4 if it had not able to build up fiscal reserves in the boom period (the two other countries did not do so). Estonia used budget surpluses and windfall revenues before the crisis to build up a rainy-day fund, the so-called Stabilization Fund, eventually equaling 9% of GDP, and then used this fund to mitigate the impact of the crisis.

The expenditure/tax mix. Even though overall in all three Baltic States the emphasis was put on expenditure measures, the relative importance shifted in time, e.g. in Latvia in 2010 the emphasis shifted more to the revenue side and in Estonia the austerity measures were almost equally divided over the revenue and expenditure side in 2010.

Table 4. Fiscal consolidation measures (% of GDP)

	Total consolidation	Revenue measures	Expenditure measures
Estonia			
2008	2.0	0.0	2.0
2009	8.9	2.7	6.2
2010	2.9	1.3	1.6
Latvia			
2008	0.5	0.5	0.0
2009	9.5	2.8	6.7
2010	4.0	2.1	1.9
Lithuania			
2008	0.0	0.0	0.0
2009	7.4	1.6	5.8
2010	6.0	2.3	3.7

Sources: OECD 2011, EC assessments of Convergence/Stability programs

Table 5 shows the content of consolidation measures. Here we follow the common classification of consolidation measures (used also by OECD, 2011, 2012a and 2012b). From table 5 it follows that cutbacks were made in all expenditure categories, except investment. The same goes for the revenue measures which involve all revenue categories.

One of the factors that is often mentioned to explain the pre-crisis boom as well as the vulnerability of the Baltic states to the crisis, is the development of private credit flow (i.e. the net amount of liabilities that especially households have incurred) and of the resulting stock of private debt. Table 3 shows that prior to the crisis private credit flow was positive in all three countries. It was much higher than in Germany, even higher than in Greece. The crisis has reduced private credit flow and consequently private debt levels in all three countries; private debts levels have been and still are relatively high in Estonia.

Domestic demand significantly exceeded GDP in all three countries in the 2004-2008 period, which had to be met by net imports (reflected in the current account deficits). Export volume changes show a clear pattern in the case of Estonia, with exports declining in the run-up to and during the crisis, but booming as from 2010. In the case of Latvia exports suffered in 2007 but picked up just at the moment (2008) when the crisis hit, followed by recovery. Exports by Lithuania have been decreasing in volume since 2009.

Table 5. Fiscal consolidation measures 2009-2010

		Estonia	Latvia	Lithuania
Expenditure measures				
	Operational measures			
	Hiring / Pay freeze	X	X	-
	Wage reduction	X	X	X
	Staff reductions	X	X	X
	Reorganizations	X	X	X
	Efficiency cuts	X	-	X
	Program measures			
	Health	X	X	X
	Education	-	X	X
	Pensions	X	X	X
	Unemployment	X	X	X
	Other social security/welfare	X	X	X
	Infrastructure	X	-	-
	Investment reductions			
Revenue measures				
	Increased standard rate of VAT	X	X	X
	Consumption tax: e.g. excise taxes on alcohol, tobacco, energy	X	X	X
	Income tax	X	X	Re*
	Corporation tax (bank bonuses)	X	-	X
	Non-fiscal revenues	X	X	X

* Lithuania reduced the personal income rate instead of increasing it.

Sources: Kickert, Randmaa-Liiv & Savi (2013)/COCOPS Trend Report; EC Research note 01/2012; EC Fiscal assessments of the three Baltic States, Consolidation Reports of the three Baltic States

Operational measures (expenditure). When looking at specific operational expenditure measures (table 5), it can be seen that the measure of hiring/pay freeze was widely used in the Baltic States. But the most prominent measure was wage reduction in the public sector. Wage cuts were made in the public sector immediately after the outset of the crisis in all three Baltic countries. As is shown in table 6, the largest wage cut in the public sector took place in Latvia in 2009 when wages in the public administrative sector were reduced by 18%, followed by Lithuania (10%) and Estonia (8%). Similar but slightly smaller cuts were made in the educational sector. Besides the pay cuts, civil servants faced cuts in their secondary benefits as additional pay funds, training funds and one-time support schemes (e.g. compensation for health-related activities, financial support for festive occasions and so on) were abolished.

Table 6. Annual wage changes in 2009

	Estonia	Latvia	Lithuania
Public services	-4.5	-9.7	-11.0
Public administration	-7.6	-18.0	-10.0
Education	-2.5	-9.9	8.0

Source: National statistical offices

Interestingly, these wage measures were accompanied by more structural reforms in the public sector as the reduction of staff and reorganization was also used as a cut-back measure in all three Baltic States. In this respect Latvia was the most extreme by targeting with these structural reforms altogether three sectors: public administration, health care, and education. According to Latvian Convergence Programs, in Latvia 39 government agencies (out of 75) were closed down, 24 hospitals (out of 49), 109 schools (out of 982) and 9 vocational schools (out of 67). In addition to the pre-mentioned reforms, the Latvian government became a significant actor in the banking sector after nationalizing the Parex Bank. In addition to these reforms, Latvia carried through also an administrative-territorial reform during the crisis period. As a result of this reorganization, one administrative level was abolished and the number of territorial units decreased from 548 to 119 (110 municipalities and 9 republican cities). Even though the administrative-territorial reform had no direct link to the consolidation strategy and had been prepared for years, it had a positive impact on public finances.

Lithuania was also carrying through major organizational reforms including abolishment of county administrations, reform of higher education and health care and a restructuring of the energy sector. According to the IMF (2013) those reforms amounted up to of about 3% of nominal GDP during the year 2009-2012; Lithuania's public sector has become the smallest in the EU after the crisis as measured by both the revenue- and expenditure-to-GDP ratio.

Estonia was the most modest in restructuring – only some service centers were established and nine mergers of government agencies took place accounting for 0.7% of GDP in 2009 and 0.4% of GDP in 2010 (OECD 2012a).

Based on data of national statistical offices, during the 2009 layoffs and restructurings the total job loss in the public sector was the biggest in Latvia (-9.2%), followed by Lithuania (-3.9%) and Estonia (-2.6%). Åslund (2012a) reports even higher figures: about 29% of Latvian civil servants lost their job, Lithuania and Estonia experienced a decrease of about 11%; but it is not clear where these data are taken from.

Efficiency cuts were used by Lithuania and Estonia, not in Latvia. In Lithuania the efficiency assessment of staff functions was carried out at the central governmental level and also centralization of procurement functions and standardized state property management was introduced. In Estonia cost-efficiency in the public sector was increased.

Program measures (expenditure): more structural reforms. All of the three countries reported cuts in the health sector during the crisis; in the case of Latvia for instance this amounted to 0.6% of GDP in 2009 and 0.2% of GDP in 2010.

According to Åslund (2012a) both Latvia and Lithuania pursued educational reform (Latvia in the entire educational sector, Lithuania in the higher education sector) aimed at encouraging saving and efficiency by introducing a funding system based on fixed amounts per pupil/student in each category. In Lithuania the reform resulted in 0.3% of GDP in 2009 and 0.5% of GDP in 2010.

Table 7. Pension reforms

	Estonia	Latvia	Lithuania
Increase of retirement age (incl. early retirement age)	X	X	X
Restructuring the pension schemes	X	-	-
Reduction of pension payments	X	-	X
Temporary pension freeze	X	X	X
Extension of contribution periods	-	X	-

Source: National consolidation reports; EC assessments of the national consolidation reports.

Labor market reforms and pension-related cutbacks were applied in all three Baltic states and are documented and discussed by various authors (Brixiova and Egert, 2012; Hermann, 2013; Kallaste and Woolfson, 2013; Masso and Krillo, 2013; Bitinas and Maccioni, 2014). As can be seen from table 7 that suspending, freezing and decreasing the rise in pension payments, increasing the retirement age and/or restructuring pension schemes (e.g. increasing the employee contribution rates) are all measures that have been applied during the reforms. All the three Baltic countries enacted their pension-related measures already during the first half of the year 2009.

Table 8. Measures taken during the crisis period (2008-2010) in the field of taxation

		Estonia	Latvia	Lithuania
Raising the VAT rate		X	X	X
Raising the excise duties rate		X	X	X
	tobacco	X	X	X
	alcohol	X	X	X
	fuel	X	X	X
Raising the tax rate for unemployment insurance		X		
Broadening the base for personal income tax by reducing the number of allowances		X	X	X
Planned income tax reduction was postponed		X		
The income tax rate decreased from 25% to 23% in 2009, then increased again to 26% in 2010, followed by a reduction to 25% in 2011			X	
The 2009 increase in corporate income tax rate, from 15% to 20% (was reversed in 2010)				X
Introducing a progressive real-estate tax, with higher rates applying to buildings with higher value, in 2009 and doubled the tax rates in 2011		-	X	-
VAT exemptions were abolished		X		X
Introducing a real-estate tax in 2011		-	-	X
Reducing personal income tax rates		-	-	X
Making exemptions to excise duties				X
With declaring income before 2010 the income tax exemption could be used counting also the first child. Because of the financial crisis this was changed and the income tax exemption could be used from the year 2010 counting from the second child.		X	-	-
Broadening of tax bases		X	X	X

Sources: National consolidation reports; EC consolidation assessments

In all three countries there were also plans to cut old-age pensions. However, existing pension levels were maintained in Latvia and Estonia, as cuts would have been in contradiction to existing statutory regulations. In Estonia old-age pensions were even raised.

The crisis also had a considerable impact on the labor market of the three Baltic States. As mentioned in section 2, in 2010, official unemployment rates in the Baltic countries were the second-highest in the EU (after Spain), reaching to 17–19 per cent. According to Kallaste & Woolfson (2013) youth unemployment rates soared to over 30 per cent in all three Baltic countries. Adding to the already suffering labor market the crisis brought along severe cuts in other social security/welfare benefits than pensions. In general overall public social expenditure was reduced by cutting unemployment and welfare benefits and increasing social security contributions. Although governments were massively putting in use the EU Structural Funds to activate the labor market, emigration to other EU countries and to the US increased considerably.

As far as infrastructure was concerned, cuts took place in (planned) public infrastructure investment projects; projects that were supposed to be built by EU structural fund support were not cut.

Revenue measures. Numerous revenue measures were applied in the three countries, as is shown by table 8. Indirect taxes were most frequently used for fiscal consolidation, with some measures in the direct taxes (notably the personal income tax), but with wealth taxes being left untouched.

The most frequently used revenue raising measure was increasing excises on alcohol, fuel and tobacco. Also, the standard rate of value added tax (VAT) was increased in all three Baltic States, from 18% to 21% in Latvia and Lithuania and to 20% in Estonia; reduced VAT rates were also increased. In Estonia and Lithuania several VAT exemptions were abolished.

As far as the use of the personal income tax is concerned, Lithuania can be looked at as an exception as it lowered its personal income tax rate during the crisis period from 24% to 21%. Even though the Estonian central government had planned before the financial crisis to decrease the income tax burden from 21% to 20% for 2009 and to 18% for 2012, because of the crisis it was not done.

From table 2 in section 3 it followed that during the crisis the tax burden decreased in Latvia and Lithuania during the crisis and in the recovery period. In Estonia the tax burden went up during the crisis (to 35.2%), it has decreased in recent years (to 32.4% in 2012), but is still higher than in the 2004-2008 period (when it ranged from 30.4% to 31.6%). As can be seen from the ratio between direct taxes and social contributions on the one hand and indirect taxes on the other hand, in table 9, the revenue measures resulted in a shift of tax burden in the field of direct taxes and social contributions to indirect taxes in Estonia (but modest) and Lithuania (quite sharp), but not in Latvia.

What type of fiscal consolidation? In section 2 some basic characteristics were outlined regarding different models of fiscal consolidation: smart fiscal consolidation (building on the idea of expansionary fiscal contractions), internal devaluation, and fiscal devaluation. To what extent can we find back characteristics of these different models in the actual fiscal consolidation measures as taken in Estonia, Latvia and Lithuania?

Table 9. Taxes (% of GDP)

	Estonia			Latvia			Lithuania		
	2004	2009	2011	2004	2009	2011	2004	2009	2011
Structure of revenues									
Indirect taxes (a)	12.3	15.1	14.2	11.9	10.9	11.6	11.2	11.8	11.9
Direct taxes (b1)	7.9	7.6	6.6	7.9	7.2	7.4	8.7	6.0	4.4
Social contributions (b2)	10.3	13.2	12.1	8.7	8.5	8.6	8.3	11.6	9.8
Total	30.5	35.9	32.9	28.5	26.6	27.6	28.2	29.4	26.1
Ratio (b1+b2)/(a)	1.48	1.38	1.32	1.39	1.35	1.38	1.52	1.49	1.19
Structure by economic function									
Consumption	11.7	14.5	13.6	11.1	10.2	10.5	10.5	11.1	11.3
Labor	16.3	18.7	17.1	14.6	13.9	13.8	14.5	14.9	12.7
Capital (incl. property)	2.6	2.8	2.2	2.9	2.6	3.2	3.1	3.3	2.1

Source: Eurostat, "Taxation trends in the European Union", 2013 edition

Based on the information above, it can be said that by and large the Baltic states have acted in accordance with the main "rules" for smart fiscal consolidation: frontloading of sizeable consolidation packages, emphasis on expenditure measures (but less so in more recent years, i.e. expenditure measures were specifically frontloaded), and embedding of consolidation measures in structural reforms.

As far as the model of internal devaluation is concerned, wage cuts in the public sector were enacted in all three states, and were part of more comprehensive public sector re-organization schemes. Labor markets absorbed the impacts of the crisis through vast increases of unemployment and through some decrease of (nominal and real) wages. But as already became clear from section 3 the actual adjustment of wages (as shown by the development of nominal unit labor costs, table 3) and of prices (as shown by the development of inflation, table 2) was relatively modest. Even when we take into account that the data in table 3 on nominal unit labor costs are 3-year average data, which makes it difficult to pin-point the exact year when nominal increases became nominal falls, it is clear that, after years of sharp increases, nominal unit labor costs fell in all three countries not directly in the first years of the crisis period, but first in 2011 and 2012 (with the biggest fall in nominal unit labor costs in Latvia in 2011: - 19.5%). Inflation figures as well as the development of the real exchange rate do also not really give evidence to the validity of the internal devaluation model in the case of the Baltic States. Although substantial cuts were made in the public sector, they did translate into an overall and substantial fall in producer prices or into increased competitiveness.

Fiscal devaluation, as the third model of consolidation, also took place to some extent only: VAT rates were increased in all three countries, but in Latvia and Estonia income taxes were also used for revenue increase, which is at odds with the basic idea of fiscal devaluation: to bring about a change in the tax mix in such a way that labor costs are reduced. In Latvia no significant shift in tax burden from direct taxes and social contributions to indirect taxes can be seen; the shift in Estonia is modest, and it is considerable only in the case of Lithuania.

If, going on the type of fiscal policy measures taken, we have to pick from the three models the model that most adequately describes what went on in the Baltic States it would be the model of smart consolidation.

How effective has fiscal consolidation been? As the data in section 3 showed, in terms of GDP growth, fiscal consolidation has been effective in all three countries. This is not to say that the consolidation measures have really been expansionary; clearly in 2009 there was a huge contraction in all three states. Effectiveness must be understood here as leading to short term recovery, as shown by the GDP growth figures for 2010. This is basic element of effectiveness that has drawn so much attention to the Baltic case: where economic growth has been sluggish throughout the EU since 2008, growth has picked up rapidly –after a deep but short recession- in the Baltic countries.

But to what extent has fiscal consolidation contributed to overcoming the basic imbalances the Baltic States faced when they were hit by the crisis: current account deficit, credit-fueled domestic demand met by net imports, declining exports due to low competitiveness, linked to sharp increases in labor costs. To a large extent these are exactly the variables that according to the models of internal and fiscal devaluation should be targeted (without nominal exchange rate changes). Although in this respect many relevant measures have been taken, as was shown above, and although real effective exchange rates have come down recently, they are still above pre-crisis levels. In addition, especially in Estonia, inflation is still high. Exports volumes have picked in Estonia and Latvia, but are still decreasing in Lithuania. This is also reflected in the development of the current account. During the crisis the fall in imports turned the balance around temporarily. Both exports and imports have increased during the recovery phase and the three countries are back to current account deficits (although they are now much smaller than during the boom). Although exports have increased, this is mainly due to integration of the Baltic exporting sectors into key European networks, especially Scandinavian networks in the Baltic rim (Kattel & Raudla, 2013), but this seems to be mostly valid for Estonia and less so for Latvia and Lithuania, as becomes clear form table 10. Table 10 shows the development of the export structure of the Baltic countries, by looking at the main destination countries/regions of their exports. Estonia is indeed well-connected to the Scandinavian countries, but this is far less so for Latvia, which increasingly is exporting to the other Baltic countries, and also for Lithuania whose main partner for export is now Russia. From table 10 it follows that the export structure of Estonia is the most stable, when we compare 2013 to 2004, but that Latvia and Lithuania show major changes in export structure. If we take exports to Germany as a proxy for in-EU competitiveness, the falling share of exports to Germany from all three countries (but also to the United Kingdom in the case of Lithuania) indicates a loss of competitiveness. In short: overall competitiveness has certainly not been improved by means of internal and/or fiscal devaluation.

Table 10. Main trade partners (export only) of Baltic States; export to country/region as % of total export, 2004 and 2013

	Estonia 2004	Estonia 2013	Latvia 2004	Latvia 2013	Lithuania 2004	Lithuania 2013
Finland/Sweden/Denmark	41.2	37.3	16.0	9.1	5.1	3.3
Other Baltic countries	13.0	16.2	17.9	29.9	15.2	15.6
Russia	5.6	10.4	6.4	11.6	9.3	19.8
Germany	8.2	4.6	12.4	7.4	10.3	7.2
United Kingdom	< 3.0	< 3.0	13.0	3.7	< 3.0	< 3.0

Source: National statistical offices

6. FISCAL EQUALIZATION WITHIN THE EU?

In the previous section it was mentioned that in deciding on austerity measures (for instance whether or not to invest in infrastructure) the position of the EU was important. What role did the EU play in fiscal consolidation in the Baltic States?

It is often stated that the EU, with its budget that is limited in size and scope, does not constitute a fully-fledged multi-level (or: federal) fiscal system in which lower-level jurisdictions are insured against (a-symmetric) shocks that they are not able to cope with alone. However, in the case of the Baltic States, support and funding by the EU has played an important role in economic recovery.

First, Latvia received a significant amount of multilateral financial support (as did Ireland, Greece, Spain, Hungary, Portugal, Romania and Cyprus). In light of a rapidly deteriorating economic situation and concerns related to the health of the banking sector, in November 2008 Latvia turned to the EU, the IMF and regional neighbors for financial assistance (Balance of Payments or BoP support). In December 2008 the Latvian authorities adopted the "Economic Stabilization and Growth Revival Program", which formed the basis for multi-lateral negotiations on a loan package. The overall amount of the package was 7.5 billion euro, of which 3.1 billion euro was from the European Union. The IMF granted Latvia the use of part of its Special Drawing Rights (amounting to 1.7 billion euro) and the Nordic countries Sweden, Denmark, Finland and Estonia (!) chipped in 1.9 billion euro. The remaining 0.8 billion euro came from the World Bank, the European Bank for Reconstruction and Development, the Czech Republic and Poland. The support started in January 2009 and formally ended in January 2012, but support was not needed anymore since October 2010. Eventually, of the initial 7.5 billion euro only 4.5 billion euro has actually been paid out and used by Latvia. Latvia is now subject to post-program surveillance until a large part of the EU-funded loans has been repaid; repayments start in 2014, against an average interest rate of 3.2% (European Commission, 2014b).

Table 10. EU funding through EU Structural Funds (% of GDP)

	2007	2008	2009	2010	2011	2012	2013
Estonia	0,46	0,70	3,40	3,67	1,47	3,78	3,29
Latvia	0,47	0,66	2,29	2,57	2,53	3,21	2,60
Lithuania	0,51	0,70	4,01	3,15	3,03	3,08	2,98

Sources: for EU funding
http://ec.europa.eu/regional_policy/thefunds/funding/index_en.cfm; for GDP
http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do; for GDP 2013:
European Commission (2014a), authors' calculations

Secondly, one of the factors why all three Baltic States recovered from the crisis so rapidly is the adequate use of European funds (Kattel and Raudla, 2013). Table 10 shows that funding from the EU Structural Funds has become more and more important for the Baltic States, especially from 2009 onwards. In the case of Estonia, for example, funding from the EU Structural Funds equals approximately 1/10 of general government revenues, which is considerable. Aidukaite (2014) argues that in the case of Lithuania the impact of the EU Structural Funds was not so significant in the period before the crisis, but became much more powerful during the crisis period and according to some was largely instrumental to economic recovery.

Moreover, as soon as it became clear (at the end of 2008) that the crisis had huge negative impacts on FDI inflows, on private spending, and on public spending on infrastructure, R&D and education, the European Commission and the Council were quick to use structural funding instruments, which, as Jacoby (2014) puts it, were available "off the shelf". First, the EU decided to accelerate spending by means of huge advance payments. In 2010 the five EU member states hardest hit by the crisis (the three Baltic States, Hungary and Romania) received 371 million euro in advances. Secondly, flexibility in program management was increased. It was made possible to amend existing operational programs, and to "frontload" EU funding over the project cycle, deadlines for the old 2000-2006 budget cycle were extended, co-financing rules were adapted, and state aid rules were relaxed. Thirdly, the eligibility of investments in energy efficiency and renewable energy for funding was increased (European Commission, 2010a).

In all three Baltic States co-funded projects were deliberately spared in fiscal consolidation measures. In various areas (infrastructure, R&D, technology projects, environmental projects, education, labor market activation) public spending was kept at existing levels and often increased. It is fair to say that structural funding, although not intended as an anti-cyclical economic policy, has become a powerful and relevant lever for promoting investment in the real economy in times of crisis (European Commission, 2010a).

7. DISCUSSION AND CONCLUSIONS

The aim of this paper was twofold. The first objective was to find out how fiscal consolidation took place in the Baltic States, and to see whether 'Baltic fiscal consolidation' is consistent with the models of consolidation that have been put forward in some of the literature. The second objective was to see what lessons can be drawn from the Baltic experience for other EU Member States.

In section 2 we put forward three models of consolidation: smart consolidation, internal devaluation and fiscal devaluation. Our findings show that the fiscal consolidation measures as taken by the Baltic states, are to a large extent consistent with the measures prescribed by the model of smart consolidation: frontloading of sizeable consolidation packages, emphasis on expenditure measures (but less so in more recent years, i.e. expenditure measures were specifically frontloaded), and embedding of consolidation measures in structural reforms. Although severe cutbacks were made in the public sector, we could not find sufficient evidence for an overall cost-reducing effect resulting in a significant increase in international competitiveness, which is the essence of the model of internal devaluation (i.e. devaluation through the real effective exchange rate, not the nominal one). As far as fiscal devaluation, the third model of consolidation, is concerned, VAT rates were increased in all three countries, but direct taxes were not exempt from increases either. Only in

Lithuania can we see a significant change in the tax mix in such a way that labor costs are reduced.

We have found that that simply presenting the Baltic countries as exemplary cases of the successful use of the models of internal and/or fiscal consolidation, does not do justice to what actually happened. The development of the current account and of the real effective exchange rate show that competitiveness was not enhanced through downward adjustment of prices/wages relative to the rest of the world. Wages were cut, but mainly (and quite drastically) in the public sector which –with tax burdens increasing rather than decreasing because of considerable consolidation measures on the revenue side- did not translate into cheaper production by exporting sectors of the economy. To some extent (and especially in Lithuania) a shift of tax burden was realized from labor to consumption, but increased trade flows (both imports and exports) were due to quality and network aspects, and to the fact that a significant part of trade continued to take place within the least-hit part of the EU, the Nordic countries, and with Russia.

Additionally we found that the EU played an important role in facilitating smooth and rapid fiscal consolidation by being very flexible and constructive in the implementation of its structural policies in the three Baltic countries.

What are the main lessons that so-called vulnerable EU Member States (Cyprus, Greece, Spain, Ireland, Portugal and maybe Slovenia and Italy) can learn from the Baltics? As Ortiz & Cummins (2013) show the composition of fiscal consolidation packages is not that much different from one country to another: worldwide countries follow the same global fiscal adjustment trends and engage in limiting or eliminating subsidies, in wage cuts in the public sector, in increasing consumption taxes, in pension, healthcare and labor market reforms, and in rationalizing social protection schemes. Why did fiscal consolidation work in the Baltics and why did it not work in some other EU Member States, such as Greece and Spain?

First, the Baltic States are small, open economies that are well-connected to regional trade partners and cannot really be regarded as "peripheral" countries. This is not true for most of the EU Member States mentioned above, which are large, far less open and truly peripheral (and thus depend more on world trade, which was and still is sluggish, than on intra-EU trade). The small scale of the Baltic economies is not only an advantage when dealing with larger regional trade partners, but also in terms of decision-making on and implementation of fiscal consolidation measures. Changing course is easier for smaller ships.

Secondly, the chosen policy was clearly pro-cyclical, but aimed at reducing the length of the cycle. The Baltic story basically is one of "biting the bullet", with hardship concentrated in a short-as-possible period, not one of "magical" expansionary fiscal contractions. The heaviest blows probably have been taken by those working in or dependent on the public sector, and by those who got unemployed (or migrated, see below). Labor markets have been relatively flexible in the Baltics since the transition that started in the 90s; the role of trade unions and collective bargaining is minimal. Social security systems, often regarded as the most important automatic stabilizers in times of economic crisis, did not fulfil that role in the Baltics, as significant cutbacks were made in unemployment and other benefits (which were not well-developed in the first place). Again: such flexibility is absent in most of the other EU Member States.

Thirdly, although we did not address the political aspects of the fiscal consolidation measures in the paper, it is worth mentioning that other authors have highlighted the fact that the austerity measures in the Baltics have not caused political unrest as they have done in Spain and Greece. Even though the financial cutbacks were rapid and huge, the people in the Baltic States broadly accepted austerity measures quietly, or even supported them. In this respect, in all three countries the outlook of accession to the Eurozone has probably played an important role. Also the magnitude of the crisis and the sharp contrast with the booming years brought along a real sense of urgency, which may have missing in other EU Member States as the decline in output was far less dramatic. According to Åslund (2012a) the way the anti-crisis programs were implemented (timely/frontloaded, comprehensive, transparent) also played a positive role. There were some protests in Latvia and Lithuania, but brief one-day riots in January 2009 seem to have had a more general political background than discontent with economic austerity, at least in the case of Latvia. There were muted and sporadic protests by trade unions and citizen interest groups throughout 2009 in all three countries, but their impact remained limited. Only in Lithuania was the voice of trade union protests heard (Masso & Krillo 2011). As Kuokštis and Vilpišauskas (2010) point out, in Estonia public trust in the government actually increased at the height of the crisis in 2009: while in spring 2009 38% of the population trusted the national government, the figure increased to 47% by the autumn of 2009, after three austerity packages had been adopted. Broad public support for the chosen policies was also shown by the re-election of the incumbent government in Latvia in 2010 (by an absolute majority of votes), and by the re-election of the Estonian government, with increased support, in 2011. If there was discontent, the people of the Baltics showed it by voting-with-their-feet (i.e. they went for the exit option rather than voice or (dis)loyalty, in Hirschman's well-known terms). The level of migration was already high in Lithuania before the crisis and Lithuania's and Latvia's censuses in 2011 show dramatic falls in population numbers. Estonia's census in 2012 shows a more modest reduction in population.

It is important to point out that although the response was basically the same for all three Baltic countries, there are also differences between them. Latvia obviously suffered from the Parex-nationalization and was forced to go for multilateral financial support. In terms of fiscal consolidation it had to make the biggest effort and had to pursue the most drastic reforms in its public sector. Estonia stands out in various ways. In terms of timing, it was the first country to be hit (as a result of very early credit contraction measures by its foreign-owned bank sector) and it started to reduce spending right away. It was able to make use of the fiscal reserves it had built up during the boom period. It was more advanced in terms of accession to the EMU than the other two countries (making it really necessary to stick to the fixed exchange rates and to comply with the other Maastricht convergence criteria). Generally the "carrot" of EMU membership has probably had a more positive effect on fiscal discipline in the Baltics then the "stick" of possible exit has had in some other EU Member States. In addition, it can be mentioned that the fall in revenue in Estonia was less due to more developed tax administration, and that the electoral cycle (with general elections only due in 2011) was more convenient than in the other two countries (Kattel & Raudla, 2013). Lithuania, as happens more often, was able to benefit fully from the experiences with fiscal consolidation in Estonia and –to a lesser extent- Latvia.

As a final remark it should be pointed out that lesson-drawing should pay attention to the pre-crisis period rather than just to the recovery period. Brixiova, Vartia & Wörgötter (2010) have argued that the crisis in the Baltics was caused by massive capital inflows, resulting in excessive booms in various sectors. Massive private borrowing has led to excessive and distorted allocation of resources to the non-tradable sector. In the case of the Baltics this refers not so much to the public sector (which is relatively small), but to parts of the private sector that deal in non-tradable goods and services. The lesson for emerging economies is to be careful in lifting capital controls (even when "pushed" for that by international organizations as the EU) and to wait for domestic financial markets to fully develop first. The lesson for the Baltic countries is to let history not repeat itself, i.e. to prevent credit-fueled excessive consumption, to aim for moderate wage developments, to keep the current account balanced, and to ensure that valuable trade links in the region are sustainable.

REFERENCES

Aidukaite, J. (2014) "Transformation of the welfare state in Lithuania: Towards globalization and Europeanization", *Communist and Post-Communist Studies,* 47:59-69.

Aiginger, K. (2011) "Why performance differed across countries in the recent crisis", *Revista economica,* 55(2): 20-27.

Alesina, A. and S. Ardagna (1998) "Tales of fiscal adjustments", *Economic Policy* 27:489-545.

Alesina, A. and F. Giavazzi (2012) *The austerity question: 'How' is as important as 'how much'.* Accessed on March 31, 2014 (http://www.voxeu.org/article/austerity-question-how-important-how-much).

Alesina, A. and R. Perotti (1995) "Fiscal expansions and adjustments in OECD countries", *Economic Policy* 21:207-247.

Alesina, A. and R. Perotti (1997) "Fiscal adjustments in OECD countries: composition and macroeconomic effects", *IMF Staff Papers* 44:210-248.

Alesina, A., R. Perotti and J. Tavares (1998) "The political economy of fiscal adjustments", *Brookings Paper on Economic Activity* (1):197-266.

Åslund, A. (2012a) "Lessons from Reforms in Central and Eastern Europe in the Wake of the Global Financial Crisis", *Working Paper* 12-7, Washington: Peterson Institute for International Economics.

Åslund, A. (2012b) "Southern Europe Ignores Lessons from Latvia at Its Peril", *Working Paper* 12-17, Washington: Peterson Institute for International Economics.

Bideleux, R. (2011) "Contrasting Responses to the International Economic Crisis of 2008-2011 in the 11 CIS Countries and in the 10 Post-Communist EU Member Countries", *Journal of Communist and Transition Studies,* 27(3-4):338-363.

Bitinas, A. and Maccioni, A. F. (2014) "Lithuanian Pension System's Reforms Transformations and Forecasts", *Universal Journal of Industrial and Business Management,* 2(1):13-23.

Brixiova, Z. and B. Égert (2012) "Labor market reforms and outcomes in Estonia", *University of Michigan: William Davidson Institute Working Paper Number* 1027.

Brixiova, Z., L. Vartia and A. Wörgötter (2010) "Capital flows and the boom-bust cycle: The case of Estonia", *Economic Systems* 34, 55-72.

Buti, M. and N. Carnot (2013) "The debate on fiscal policy in Europe: beyond the austerity myth", *ECFIN Economic Brief* No. 20.

Calmfors, L. (1998) “Macroeconomic policy, wage setting, and employment – what difference does the EMU make?”, *Oxford Review of Economic Policy,* 14(3):125-151.

Dellepiane-Avellaneda, S. (2014) “The Political Power of Economic Ideas: The Case of ‘Expansionary Fiscal Contractions’”, *The British Journal of Politics and International Relations* (early view).

Deroose, S., E. Flores, G. Guidice and A. Turini (2010) “The Tale of the Baltics: Experiences, Challenges Ahead and Main Lessons”, *ECFIN Economic Brief*.

Di Comite, F., Giudice, G., Lendvai, J. and Toming, I. (2009) *Fiscal Consolidation in the Midst of the Crisis*. Accessed on February 27, 2014 (https://www.bancaditalia.it/studiricerche/convegni/atti/fiscal_policy_and_growth/session1/DiComite_Giudice_Lendvai_Toming.pdf).

EEAG (2013) “The EEAG Report on the European Economy, Recommendations for Europe”, Munich: CESifo, 6-7.

EEAG (2014) “The EEAG Report on the European Economy, Austerity: Hurting but Helping”, Munich: CESifo, 75-90.

Eesti Pank (2011) “Eesti maksebilansi aastaraamat 2010”, Eesti Pank 2011.

Eesti Pank (2012) “Eesti maksebilansi aastaraamat 2011”, Eesti Pank 2012.

Eesti Pank (2013) “Eesti maksebilansi aastaraamat 2012”, Eesti Pank 2012.

Epstein, R. (2014) “Overcoming ‘Economic Backwardness’ in the European Union”, *Journal of Common Market Studies,* 52(1):17-34.

European Commission (2009a) “Estonia: Macro Fiscal Assessment. An Analysis of the December 2008 Update of the Convergence Programme”, Brussels, 4 March 2009.

European Commission (2009b) “Latvia: Macro Fiscal Assessment. An Analysis of the January 2009 Update of the Convergence Programme”, Brussels, 4 March 2009.

European Commission (2009c) “Lithuania: Macro Fiscal Assessment. An analysis of the January 2009 Update of the Convergence Programme”, Brussels, 11 March 2009.

European Commission (2010a) “Cohesion Policy: responding to the economic crisis”, Commsission Staff Working Paper, Brussels, SEC(201) 1291 final.

European Commission (2010b) “Estonia: Macro Fiscal Assessment. An Analysis of the January 2010 Update of the Convergence Programme”, Brussels, 31 March 2010.

European Commission (2010c) “Latvia: Macro Fiscal Assessment. An Analysis of the December 2008 Update of the Convergence Programme”, Brussels, 7 April 2010.

European Commission (2010d) “Lithuania: Macro Fiscal Assessment. An Analysis of the February 2010 Update of the Convergence Programme”, 7 April 2010.

European Commission (2012) “The distributional effects of fiscal consolidation in nine EU countries”, Research note 01/2012.

European Commission (2013) “Alert Mechanism Report 2014”, COM(2013) 790 final.

European Commission (2014a) “European Economic Forecast Winter 2014”, *European Economy* 2/2014.

European Commission (2014b) “EU BOP Assistance to Latvia. Fourth Review under Post-Programme Surveillance”, DG ECFIN, Brussels, 20 January 2014.

European Commission (2014c) “Consolidation of the revenue side and growth-friendly tax structures: an indicator based approach”, *Economic papers* 513, February 2014.

European Commission (2014d) “European Economic Forecast Autumn 2014”, *European Economy* 7/2014.

Eurostat (2013) “Taxation trends in the European Union. Data for the EU Member States, Iceland and Norway” in: Eurostat Statistical books, 2013 edition.

Giavazzi, F. and M. Pagano (1990) “Can severe fiscal contractions be expansionary? Tales of two small European countries”, *NBER Macroecoomics Annual* 5, 75-111.

Giavazzi, F. and M. Pagano (1996) “Non-Keyesian effects of fiscal policy changes: International evidence and the Swedish experience”, *Swedish Economic Policy Review* 3(3):67-103.

Hall, P. (2013) “The political origins of our economic discontents: Contemporary adjustment problems in historical perspective” in: M. Kahler and D. Lake (eds), *Politics in the new Hard Times: The Great Recession in Comparative Perspective*, pp. 120-149, Ithaca, NY: Cornell University Press.

Hemming, R., M. Kell and S. Mahfouz (2002) “The effectiveness of fiscal policy in stimulating economic activity: A review of the literature”, *Washington: IMF Working Paper* WP/02/208.

Hermann, C. (2013) “Crisis, structural reform and the dismantling of the European Social Model(s)”, *Working paper*, Institute for International Political Economy Berlin, No 26/2013.

Heylen, F. and G. Everaert (2000) “Success and failure of fiscal consolidation in the OECD: A multivariate analysis”, *Public Choice* 105(1-2):103-124.

International Monetary Fund (2013) “Republic of Lithuania: Selected Issues”, *IMF Country Report* no 13/82.

Jacoby, W. (2014) “The EU Factor in Fat Times and in Lean: Did the EU Amplify the Boom and Soften the Bust?”, *Journal of Common Market Studies* 52(1):52-70.

Jõgiste K., P. Peda and G. Grossi (2012) ”Budgeting in a Time of Austerity: The Case of the Estonian Central Government”, *Public Administration and Development*, 32 (2):181-195.

Kallaste, E. and C. Woolfson (2013) “Negotiated responses to the crisis in the Baltic countries”, *Transfer: European Review of Labor and Research* 19(2):253-266.

Kattel, R. and R. Raudla (2013) “The Baltic Republics and the Crisis of 2008-2011”, *Europe-Asia Studies*, 65(3): 426-449.

Kickert, W., T. Randma-Liiv and R. Savi (2013) “Fiscal Consolidation in Europe: A Comparative Analysis”, COCOPS Trend Report.

Kolev, G. and J. Matthes (2013) “Smart Fiscal Consolidation. A Strategy for Achieving Sustainable Publioc Finance and Growth”, Brussels: Centre for European Studies/EPP.

Koske, I. (2013) “Fiscal Devaluation – Can it Help to Boost Competitiveness?”, Paris: OECD Economics Department Working Papers No. 1089.

Krugman, P. (1995) “Peddling Prosperity: Economic Sense and Nonsense in the Age of Diminished Expectations”, New York: W.W. Norton & Company.

Kumar, M., D. Leigh and A. Plekhanov (2007) “Fiscal adjustments: Determinants and macroeconomic consequences”, Washington: IMF Working Paper WP/07/178.

Kuokštis, V. and R. Vilpišauskas (2010) “Economic Adjustment to the Crisis in the Baltic States in Comparative Perspective”, Institute of International Relations and Political Science, Vilnius University, paper prepared for the 7th Pan-European International Relations Conference, September 2010, Stockholm.

Lindner, A. (2011) “Macroeconomic Adjustment: the Baltic States versus Euro Area Crisis Countries”, *Intereconomics*, 6:340-345.

Masso, J. & K. Krillo (2011) “Labor Markets in the Baltic States During the Crisis 2008-2009: the Effect on Different Labor Market Groups“, University of Tartu.

McDermott, J. and R. Wescott (1996) “An empirical analysis of fiscal adjustments”, *IMF Staff papers*, 43(4):723-753.

Medve-Bálint, G. (2014) “The Role of the EU in Shaping FDI Flows to East Central Europe”, *Journal of Common Market Studies*, 52(1):35-51.

Mezö, J. and Á. Bagi (2012) “Crisis Management in the Baltic States”, MPRA Paper No. 40366.

Ministry of Finance of Estonia (2008) “Updated convergence programme 2008”, Tallinn, 4 December 2008.

Ministry of Finance of Estonia (2010) “Updated convergence programme 2010”, Tallinn, 28 January 2010.

Ministry of Finance of Estonia (2011) “Stability Programme 2011”, Tallinn, April 2011.

Ministry of Finance of Republic of Latvia (2010) “Convergence Programme of the Republic of Latvia 2009-2012”, Latvijas Respublikas Finanšu Ministrija.

Ministry of Finance of Republic of Latvia (2011) “Convergence Programme of the Republic of Latvia 2011-2014”, April 2011.

Mooij, R, de and M. Keen (2012) “Fiscal Devaluation and Fiscal Consolidation: The VAT in Troubled Times”, Washington: IMF Working Paper no. 12/85.

Mulas-Granados, C. (2004) “Voting against spending cuts: The electoral costs of fiscal adjustments in Europe”, *European Union Politics,* 5:467-493.

Mulas-Granados, C. (2006) “Economics, Politics and Budgets: The Political Economy of Fiscal Consolidations in Europe”, Basingstoke: Palgrave Macmillan.

OECD (2011) “Restoring Public Finances”, Special Issue of the OECD Journal on Budgeting.

OECD (2012a) *Fiscal consolidation: OECD country profiles: Estonia*. Accessed in February 27, 2014 (http://www.keepeek.com/Digital-Asset-Management/oecd/governance/restoring-public-finances-2012-update/estonia_9789264179455-13-en#page1).

OECD (2012b) “Restoring Public Finances, 2012 Update”, Special Issue of the OECD Journal on Budgeting.

Ortiz, I. and M. Cummins (2013) “The Age of Austerity: A Review of Public Expenditures and Adjustment Measures in 181 Countries”, New York: Initiative for Policy Dialogue/Geneva: The South Centre.

Perotti, R. (1996) “Fiscal consolidation in Europe: Composition matters”, *American Economic Review*, 86(2): 105-110.

Perotti, R. (1998) “The political economy of fiscal consolidations”, *The Scandinavian Journal of Economics*, 100: 367-394.

Purfield, C. and C.B. Rosenberg (2010) “Adjustment Under a Currency Peg: Estonia, Latvia and Lithuania During the Global Financial Crisis 2008-2009”, *IMF Working Paper* 10/213.

Rahandusministeerium (2009) *2010. aasta riigieelarve seaduse seletuskiri*. Accessed on February 28, 2014 (http://www.fin.ee/riigieelarved-2001-2010).

Rahandusministeerium (2010) *2011. aasta riigieelarve seaduse seletuskiri*. Accessed on February 28, 2014 (http://www.fin.ee/riigieelarve-2011).

Rahandusministeerium (2011) *2012. aasta riigieelarve seaduse eelnõu seletuskiri*. Accessed on February 28, 2014 (http://www.fin.ee/riigieelarve-2012).

Rahandusministeerium (2012) *2013. aasta riigieelarve seaduse eelnõu seletuskiri*. Accessed on February 28, 2014 (http://www.fin.ee/riigieelarve-2013).

Sinn, H.-W. (2014) "Austerity, Growth and Inflation: Remarks on the Eurozone's Unresolved Competitiveness Problem", The World Economy (early view).

The Government of the Republic of Lithuania (2009) "The Convergence Programme of Lithuania of 2008", Resolution no 30, 21 January 2009.

The Government of the Republic of Lithuania (2010) "The Convergence Programme of Lithuania of 2009", Resolution no 173, 19 March 2010.

The Government of Republic of Lithuania (2011) "Convergence Programme of Lithuania of 2011", Resolution no 491, 27 April 2011.

Weisbrot, M. and R. Ray (2011) "Latvia's Internal Devaluation: A Success Story?", Washington: Center for Economic and Policy Research.